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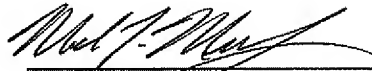
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

<u>Patent No.</u>	<u>Serial No.</u>	<u>Patent Date</u>	<u>US Filing Date</u>	<u>Confirmation No.</u>	<u>Attorney Docket No.</u>
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Respectfully Submitted,



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**(12) United States Patent**  
**Inukai****(10) Patent No.: US 7,425,937 B2**  
**(45) Date of Patent: Sep. 16, 2008****(54) DEVICE AND DRIVING METHOD THEREOF****(75) Inventor: Kazutaka Inukai, Kanagawa (JP)****(73) Assignee: Semiconductor Energy Laboratory Co., Ltd. (JP)****(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 10 days.

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**FOREIGN PATENT DOCUMENTS****(21) Appl. No.: 10/633,964**

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*Primary Examiner*—Prabodah Dharia*(74) Attorney, Agent, or Firm*—Cook Alex Ltd.**(51) Int. Cl.****G09G 3/30** (2006.01)**(52) U.S. Cl. .... 345/76****(58) Field of Classification Search .... 345/204, 345/205, 206, 87–99, 100, 76**  
See application file for complete search history.**(57) ABSTRACT**

To provide a display device and its driving method free from lack of writing time, which usually accompanies an increase in size of a display device and enhancement in definition. Therefore, there is provided a display device and a driving method in which  $x$  ( $x$  is a natural number equal to or larger than 4) data lines are placed in each column to simultaneously supply video signals to  $x$  pixels through the  $x$  data lines. The present invention makes it possible to supply video signals to  $x$  pixels simultaneously as opposed to conventional dot sequential driving where a signal is supplied to one pixel at a time. Furthermore, a display device of the present invention and its driving method make it possible to supply video signals to  $(x \times n)$  pixels at once as opposed to conventional linear sequential driving where only  $n$  pixels in the first to last (the last column is the  $n$ -th column) columns receive signals simultaneously. Thus the present invention can make the speed of writing video signals in pixels  $x$  times faster than prior art.

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**39 Claims, 14 Drawing Sheets**